DOCKET NO. 146800

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Serial Number.

10/655,988

Application to Reissue U.S. Pat.

5,405,911

Filed: Sept. 4, 2003

Inventor: Handlin, Jr., et al.

For: Butadiene Polymers Having Terminal Functional Groups

Notice of Reissue Application Published in O.G.: December 23, 2003

DECLARATION IN SUPPORT OF PROTEST

I, Taejun Yoo, hereby declare and say that:

- 1. I am skilled in the art of polymerization of butadiene and testing of properties of butadiene polymers.
- I was awarded a Ph.D. in Polymer Sciences by the University of Akron in 1994, my doctoral thesis relating to anionic polymerization of poybutadienes.
- 3. I did post-doctoral research at Rensselaer Polytechnic Institute,.
- 4. Following my post-doctoral research at Rensselaer, I was employed in South Korea.
- Following my employment in South Korea, I did additional post-doctoral research at University of Akron.
- 6. Since 2001, I have been employed by Sartomer Company in its research department conducting experimental work in the field of polybutadienes.
- 7. I am familiar with a publication entitled "The Hydrogenation of OH-Terminated Telechelic Polybutadienes in the Presence of a Homogenous Hydrogenation Catalysts Based on Tris(triphenylphophine)rhodium Chloride" by Karel Bouchal, Michal Ilavsky and Eva Zurková. Die Angewandte Makromolekulare 165, 165-180 (1989), which, I have been told by our attorney, was cited by reissue-applicants in a Supplemental Information Disclosure Statement as reference AM. Bouchal, et al. disclose on page 167 the synthesis of hydroxyl terminated telechelic polybutadienes prepared by anionic polymerization of butadiene on dilithium catalyst and functionalized with ethylene oxide having M_p=5100, functionality distribution of f₀=1

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mol-%, f_1 = 9 mol-%, and f_2 = 90 mol-% (i.e., "about two or more terminal functional groups per molecule"), with 1,2-addition of 59.1%. I obtained such polymer and hydrogenated it to a degree of hydrogenation of greater than 98%.

- 8. Such polymer was measured by me to have a viscosity of 114,000 centipoise at room temperature, and therefore a ratio of viscosity (poise at room temperature) to peak molecular weight raised to the 3.4 power of 0.3 times 10⁻⁹.
- 9. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Taeiun Yoo

Date: February 23, 2004